



Preliminary Product Information Sheet

EPO-TEK® T905-1 Black (formerly 78-121-1 Black)

Note: These are typical properties to be used as a guide only, not a specification. Data below is not guaranteed. Different batches, conditions and applications yield differing results.

Date: September 2017
Rev: III
No. of Components: Two
Mix Ratio by Weight: 100 : 20
Specific Gravity: Part A: 2.37 Part B: 1.03
Pot Life: 30 Minutes
Shelf Life- Bulk: One year at room temperature

Recommended Cure: 80°C / 1 Hour

Minimum Alternative Cure(s):
May not achieve performance properties listed below
 60°C / 2 Hours
 23°C / 24 Hours

NOTES:

- Container(s) should be kept closed when not in use.
- Filled systems should be stirred thoroughly before mixing and prior to use.
- Performance properties (rheology, conductivity, others) of the product may vary from those stated on the data sheet when bi-pak/syringe packaging or post-processing of any kind is performed. Epoxy's warranties shall not apply to any products that have been reprocessed or repackaged from Epoxy's delivered status/container into any other containers of any kind, including but not limited to syringes, bi-paks, cartridges, pouches, tubes, capsules, films or other packages.
- Syringe packaging will impact initial viscosity and effective pot life, potentially beyond stated parameters.

Product Description: Thermally conductive, electrically insulating epoxy suggested for general adhesive bonding, sealing, potting and encapsulation. Replacement for EPO-TEK® T905 Black.

MATERIAL CHARACTERISTICS*:

PHYSICAL PROPERTIES:		Cure condition: 80°C / 1 Hour	
Color (before cure):		Part A: Black	Part B: Amber
Consistency:		Pourable paste	
Viscosity (23°C) @ 20 rpm:		12,180	cPs
Thixotropic Index:			
Glass Transition Temp:		61	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):	Below Tg:	25	x 10 ⁻⁶ in/in°C
	Above Tg:	131	x 10 ⁻⁶ in/in°C
Shore D Hardness:		88	
Lap Shear @ 23°C:		1,816	psi
Die Shear @ 23°C:		16.1	Kg
Degradation Temp:		344	°C
Weight Loss:	@ 200°C:	0.27	%
	@ 250°C:	1.07	%
	@ 300°C:	2.67	%
Suggested Operating Temperature:		< 250	°C (Intermittent)
Storage Modulus:		442,745	psi
Particle Size:		≤ 50	microns
ELECTRICAL AND THERMAL PROPERTIES:			
Thermal Conductivity:		0.6	W/mK

The data above is INITIAL only - it may be changed at any time, for any reason without notice to anyone. It is provided only as a guide for evaluation/consideration.

* These material characteristics are typical properties that are based on a limited number of samples/batches. All properties are based on the cure indicated above. Some properties may vary as manufactured quantities are scaled up to commercialized production levels.